

**Listing of Claims:**

Please **amend** the claims as follows:

**Claim 1 (Currently Amended)** An isolated nucleic Nucleic acid that codes for an androgen-binding androgen receptor, wherein said nucleic acid characterized in that it comprises

a. the The nucleotide ~~sequence~~ sequences that are shown in SEQ ID NO:1 or SEQ ID NO:3 Seq ID NO 1 and/or 3,

b. a nucleotide sequence that codes for a polypeptide of SEQ ID NO 2 or SEQ ID NO:4 corresponds to the sequence from a. within the scope of the degeneration of the genetic code, or

c. a nucleotide sequence that hybridizes to the complement of SEQ ID NO:2 or SEQ ID NO:3, with the sequences from a. and/or b. under stringent conditions comprising washing for 1 hour at 62°C in 0.2 x SSC and 0.1% SDS,

wherein said nucleic acid codes for an androgen-binding receptor that modulates the activity of the androgen receptor (AR).

**Claim 2 (Currently Amended)** An isolated nucleic Nucleic acid according to claim 1, wherein said nucleic acid it comprises a protein-coding section of the nucleic acid sequences that are shown in SEQ ID NO:6 Seq ID NO 1 and/or 3.

**Claim 3** (Currently Amended) An isolated nucleic acid which ~~Nucleic acid, wherein it~~ codes for a polypeptide with the amino acid sequence ~~that is shown in~~ SEQ ID NO:2 ~~Seq ID NO~~ 2 and/or 4.

**Claim 4** (Withdrawn) Polypeptide, wherein it is coded by a nucleic acid according to claim 1.

**Claim 5** (Withdrawn) Polypeptide, wherein it comprises the amino acid sequence that is shown in Seq ID NO 2 or 4.

**Claim 6** (Withdrawn) Peptide, wherein it comprises the sequence that is shown in Seq. ID NO 5.

**Claim 7** (Withdrawn) Peptide, wherein it comprises the amino acid sequence that is shown in Seq. ID NO 6.

**Claim 8** (Withdrawn) Use of a polypeptide according to claim 4 or a peptide comprising a sequence of Seq ID NO 5 for the production of antibodies.

**Claim 9** (Withdrawn) Antibodies against a polypeptide according to claim 4 or against a peptide comprising a sequence of Seq ID NO 5.

**Claim 10** (Withdrawn) Use of an antibody for detection of a polypeptide coded by a nucleic acid of claim 1 in the tumor tissue.

**Claim 11** (Withdrawn) Use of a probe with nucleic acid sequences that are complementary to the nucleic acid sequences, that code for the peptide comprising a sequence of Seq ID NO 5, for the

production of a reagent for detecting the presence of mRNA in tumor cells according to claim 1.

**Claim 12** (Currently Amended) An expression vector comprising ~~Vector, wherein it contains~~  
~~at least one copy of~~ a nucleic acid according to claim 1.

**Claim 13** (Currently Amended) A cell comprising an expression ~~Cell, wherein it is~~  
~~transfected with a nucleic acid according to claim 1 or a vector according to~~ containing a nucleic  
~~acid of claim 1~~ 12.

**Claim 14** (Currently Amended) A cell ~~Cell~~ according to claim 13, wherein the cell ~~it~~ is  
selected from the group consisting ~~that consists~~ of PC-3 cells, LNCaP cells, CV-1 cells, CV-1  
cells and Dunning cells.

**Claim 15** (Cancelled)

**Claim 16** (Withdrawn) Use of

- a. A nucleic acid according to claim 1,
- b. a polypeptide coded by a nucleic acid of claim 1,
- c. a peptide with the amino acid sequence that is shown in Seq ID NO 5 or
- d. a cell transformed with a nucleic acid of claim 1,
- e. to identify effectors of a polypeptide coded by a nucleic acid of claim 1.

**Claim 17** (Withdrawn) Test system for detecting effectors of the polypeptides according to the  
invention, whereby

- a. A reporter gene is expressed in a cell transformed with a nucleic acid of claim  
1, and

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- b. this cell, if it contains only a little or no polypeptide coded by a nucleic acid of claim 1, is transfected in addition with a vector comprising a nucleic acid of claim 1,
- c. the cells are cultivated in the presence or absence of the test substances and
- d. the alteration of the expression of the reporter gene is measured.

**Claim 18**      **(Withdrawn)** Test system for detecting test substances with antiandrogenic activity, whereby

- a. A reporter gene is expressed in a cell transformed with a nucleic acid of claim 1, and
- b. this cell, if it contains only a little or no polypeptide coded by a nucleic acid of claim 1 is transfected in addition with a vector containing a nucleic acid of claim 1,
- c. the cell is cultivated in the presence or absence of test substances with the simultaneous presence of an androgen, and
- d. the alteration of the expression of the reporter gene is measured.

**Claim 19**      **(Cancelled)**

**Claim 20**      **(Withdrawn)** Process for the preparation of a pharmaceutical agent, whereby

- a. Substances are brought into contact with a test system according to claim 17,
- b. the action of the substances on the test system in comparison to controls is measured,
- c. a substance that shows a modulation of the expression of the heterologous polypeptide in step b. is identified,

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- d. and the substance that is identified in step c. is mixed with formulation substances that are commonly used in pharmaceuticals.

**Claim 21 (Cancelled)**

**Claim 22 (Cancelled)**

**Claim 23 (Withdrawn)** Use of a nucleic acid according to claim 1 in the gene therapy of androgen-dependent diseases.

**Claim 24 (Previously Presented)** Use of a substance that is a pharmaceutical agent that is prepared according to claim 20 for the production of a medication for the treatment of androgen-dependent diseases.

**Claim 25 (Previously Presented)** Use of a substance that is a pharmaceutical agent that is prepared according to claim 20 for the production of a medication for male birth control.

**Claim 26 (New)** A process for producing an androgen-binding receptor, comprising cultivating a cell of claim 13 that comprises an expression vector comprising a nucleic acid that codes for an androgen-binding receptor, and producing said androgen-binding receptor in said cell.

**Claim 27 (New)** An isolated nucleic acid according to claim 1, wherein said nucleic acid codes for an androgen-binding receptor that acts as a transrepressor for the androgen receptor.

**Claim 28 (New)** An isolated nucleic acid according to claim 1, wherein said nucleic acid codes for a human androgen-binding receptor.